

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method ~~of making a rigid polyurethane foam~~, comprising mixing a polyisocyanate component with a polyol component in the presence of at least one catalyst for the reaction of a polyol or water with a polyisocyanate and subjecting the mixture to conditions sufficient to cure to form a rigid polyurethane foam having a decreased water absorption characteristic, wherein (a) the polyisocyanate component contains an isocyanate-terminated prepolymer made by reacting an excess of an organic polyisocyanate with (i) at least one polyol and (ii) at least one hydroxy-functional acrylate, (b) the polyol component contains an effective amount of a blowing agent and isocyanate-reactive materials that include at least one hydrophobic polyol comprising an ester of a fatty acid and glycerol; ~~selected from the group consisting of castor oil, soybean oil, and combinations thereof;~~ (c) the ratio of isocyanate groups in the polyisocyanate component to the number of isocyanate-reactive groups in the polyol component is less than 1:1; and (d) the polyisocyanate component has a functionality of between about 2.0 and about 4.0.

2. (Original) The invention according to claim 1, wherein the polyurethane foam has a bulk density in the range of about 2 to about 40 pounds per cubic foot.

3. (Original) The invention according to claim 1, wherein the volume ratio of the polyisocyanate component to polyol component is about 1:1.

4. (Original) The invention according to claim 1, wherein the hydroxy-functional acrylate is a methacrylate.

5. (Original) The invention according to claim 1, wherein at least one polyol in the polyol component contains a tertiary amine group.

6. (Original) The invention according to claim 1, wherein the catalyst includes a reactive amine catalyst.

7. (Original) The invention according to claim 1, wherein the blowing agent is water or a chemical blowing agent that releases CO₂.

8. (Original) The invention according to claim 1, wherein the organic polyisocyanate is MDI or a polymeric MDI.

9. (Original) The invention according to claim 1, wherein the foam is formed into an automotive component.

10. (Currently Amended) A product comprising a rigid polyurethane foam formed by mixing a polyisocyanate component with a polyol component in the presence of at least one catalyst for the reaction of a polyol or water with a polyisocyanate and subjecting the mixture to conditions sufficient to cure to form a rigid polyurethane foam having a decreased water absorption characteristic, wherein (a) the polyisocyanate component contains an isocyanate-terminated prepolymer made by reacting an excess of an organic polyisocyanate with (i) at least

one polyol and (ii) at least one hydroxy-functional acrylate, (b) the polyol component contains an effective amount of a blowing agent and isocyanate-reactive materials that include at least one hydrophobic polyol comprising an ester of a fatty acid and glycerol; ~~selected from the group consisting of castor oil, soybean oil, and combinations thereof;~~ (c) the ratio of isocyanate groups in the polyisocyanate component to the number of isocyanate-reactive groups in the polyol component is less than 1:1; and (d) the polyisocyanate component has a functionality of between about 2.0 and about 4.0.

11. (Original) The invention according to claim 10, wherein the polyurethane foam has a bulk density in the range of about 2 to about 40 pounds per cubic foot.

12. (Original) The invention according to claim 10, wherein the volume ratio of the polyisocyanate component to polyol component is about 1:1.

13. (Original) The invention according to claim 10, wherein the hydroxy-functional acrylate is a methacrylate.

14. (Original) The invention according to claim 10, wherein at least one polyol in the polyol component contains a tertiary amine group.

15. (Original) The invention according to claim 10, wherein the catalyst includes a reactive amine catalyst.

16. (Original) The invention according to claim 10, wherein the blowing agent is water or a chemical blowing agent that releases CO₂.

17. (Original) The invention according to claim 10, wherein the organic polyisocyanate is MDI or a polymeric MDI.

18. (Original) The invention according to claim 10, wherein the foam is formed into an automotive component.

19. (Currently Amended) A product comprising a rigid polyurethane foam formed by mixing a polyisocyanate component with a polyol component in the presence of at least one catalyst for the reaction of a polyol or water with a polyisocyanate and subjecting the mixture to conditions sufficient to cure to form a rigid polyurethane foam having a decreased water absorption characteristic and having a bulk density in the range of about 2 to about 40 pounds per cubic foot, wherein (a) the polyisocyanate component contains an isocyanate-terminated prepolymer made by reacting an excess of an organic polyisocyanate with (i) at least one polyol and (ii) at least one hydroxy-functional acrylate, (b) the polyol component contains an effective amount of a blowing agent and isocyanate-reactive materials that include at least one hydrophobic polyol comprising an ester of a fatty acid and glycerol; selected from the group consisting of castor oil, soybean oil, and combinations thereof; (c) the ratio of isocyanate groups in the polyisocyanate component to the number of isocyanate-reactive groups in the polyol component is less than 1:1, wherein the volume ratio of the polyisocyanate component to polyol component is about 1:1; and (d) the polyisocyanate component has a functionality of between about 2.0 and about 4.0.

20. (Original) The invention according to claim 19, wherein the hydroxy-functional acrylate is a methacrylate.

21. (Original) The invention according to claim 19, wherein at least one polyol in the polyol component contains a tertiary amine group.

22. (Original) The invention according to claim 19, wherein the catalyst includes a reactive amine catalyst.

23. (Original) The invention according to claim 19, wherein the blowing agent is water or a chemical blowing agent that releases CO₂.

24. (Original) The invention according to claim 19, wherein the organic polyisocyanate is MDI or a polymeric MDI.

25. (Original) The invention according to claim 19, wherein the foam is formed into an automotive component.

26-47. (Canceled)

48. (New) The invention according to claim 1 wherein the ester is from at least one of castor oil or soybean oil.

49. (New) The invention according to claim 1 further comprising using the rigid polyurethane foam as a reinforcing foam or crash support foam in an automobile.

50. (New) The invention according to claim 1 further comprising using the rigid polyurethane foam to make a headliner, doorframe, pillar or rocker panel in an automobile.